# ITU-T Study Group 3:
# Main Achievements and On-going Work

## Dominique Wurges, ITU-T Study Group 3 Vice-Chair

ITU Regional Economic Dialogue on Information and Communication
Technologies for Europe and CIS
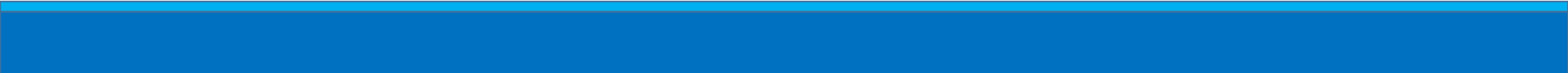(RED-2019)
30-31 October 2019 | Odessa, Ukraine

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# About ITU-T Study Group 3

The new mandate of SG3 for the 2017-2020 study period was confirmed by WTSA-16 in Hammamet.
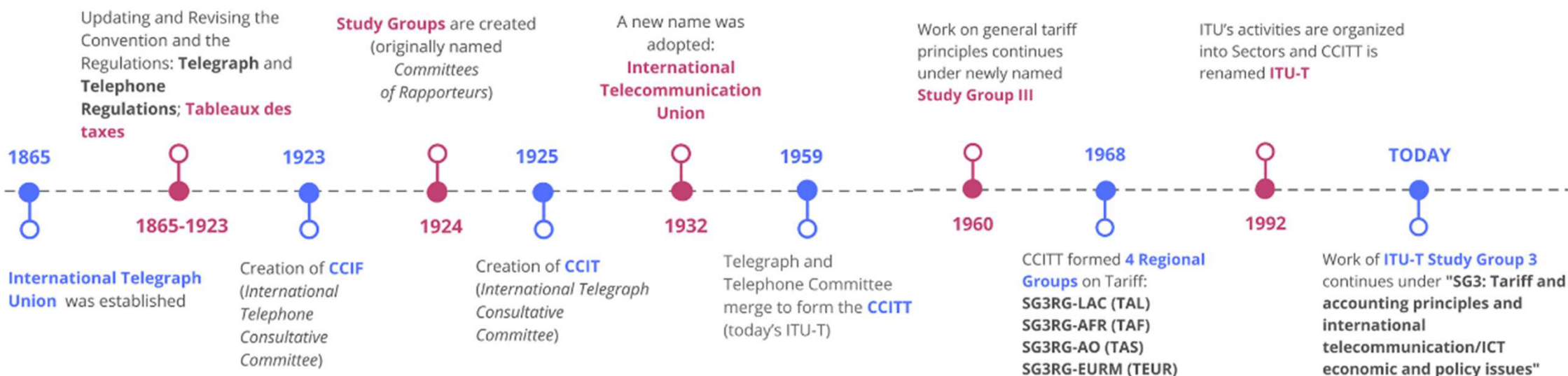
Study Group 3 is responsible, *inter alia:*
— for studying international telecommunication/ICT **policy and economic issues** and **tariff and accounting matters** (including costing principles and methodologies),
— with a view to informing the development of **enabling regulatory models and framework**
— WTSA-16 Resolution 2 goes on to say that SG3:
…" will study **the economic and regulatory impact of the Internet**, convergence (services or infrastructure) and new services, such as OTT, on international telecommunication services and networks."

SG3 is Lead Study Group:
— on tariff and accounting principles relating to international telecommunication/ICT
— for economic issues relating to international telecommunication/ICT
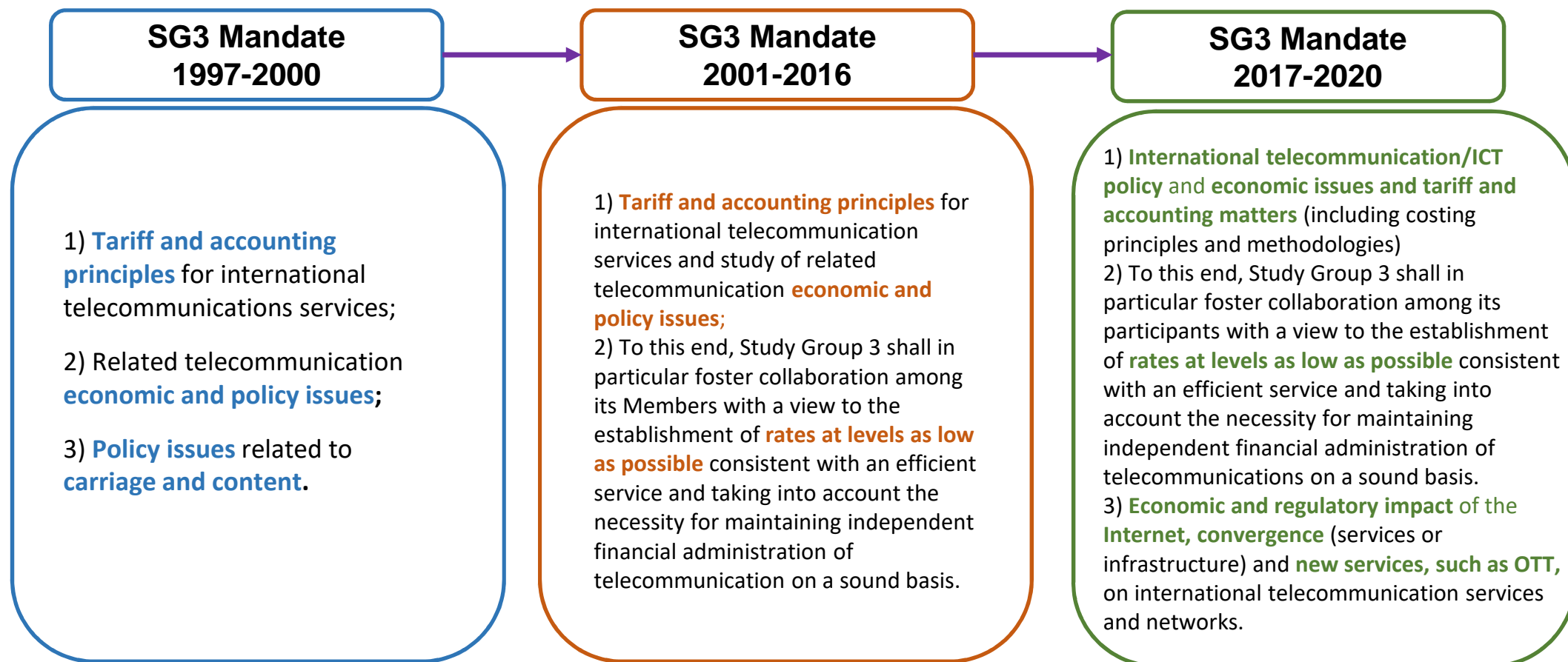— for policy issues relating to international telecommunication/ICT

# ITU's long history and solid mandate in this area



**Updating and Revising the Convention and the Regulations: Telegraph** and **Telephone Regulations; Tableaux des taxes**

**Study Groups** are created (originally named *Committees of Rapporteurs*)

A new name was adopted: **International Telecommunication Union**

Work on general tariff principles continues under newly named **Study Group III**

ITU's activities are organized into Sectors and CCITT is renamed **ITU-T**

**1865** — **1923** — **1925** — **1959** — **1968** — **TODAY**

**1865-1923** — **1924** — **1932** — **1960** — **1992**

**International Telegraph Union** was established

Creation of **CCIF** (*International Telephone Consultative Committee*)

Creation of **CCIT** (*International Telegraph Consultative Committee*)

Telegraph and Telephone Committee merge to form the **CCITT** (today's ITU-T)

CCITT formed **4 Regional Groups** on Tariff:
**SG3RG-LAC (TAL)**
**SG3RG-AFR (TAF)**
**SG3RG-AO (TAS)**
**SG3RG-EURM (TEUR)**

Work of **ITU-T Study Group 3** continues under **"SG3: Tariff and accounting principles and international telecommunication/ICT economic and policy issues"**
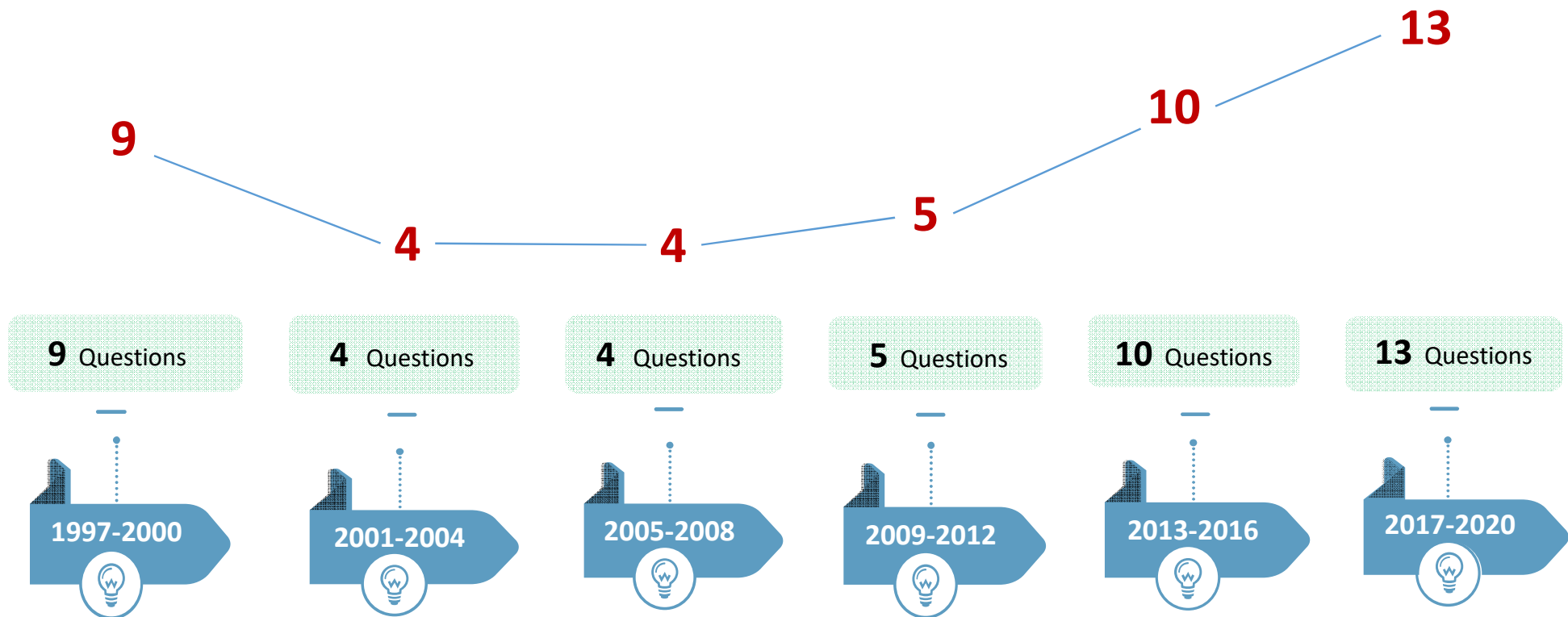
ITU's work on tariffs and interconnection dates back to the origins of the ITU and as such, it can be said that it is part of the very DNA of the organization.

On tariff issues, ITU-T Study Group 3 is the successor of Committees of Rapporteurs (later renamed study groups) dating back to 1928 , and has a long-standing mandate on economic and policy issues.

# SG3 Mandate over the recent 6 Study Periods (1997-2020)

| SG3 Mandate 1997-2000 | SG3 Mandate 2001-2016 | SG3 Mandate 2017-2020 |
|---|---|---|

**SG3 Mandate 1997-2000**

1) **Tariff and accounting principles** for international telecommunications services;

2) Related telecommunication **economic and policy issues**;

3) **Policy issues** related to **carriage and content**.

**SG3 Mandate 2001-2016**

1) **Tariff and accounting principles** for international telecommunication services and study of related telecommunication **economic and policy issues**;

2) To this end, Study Group 3 shall in particular foster collaboration among its Members with a view to the establishment of **rates at levels as low as possible** consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunication on a sound basis.

**SG3 Mandate 2017-2020**

1) **International telecommunication/ICT policy** and **economic issues and tariff and accounting matters** (including costing principles and methodologies)

2) To this end, Study Group 3 shall in particular foster collaboration among its participants with a view to the establishment of **rates at levels as low as possible** consistent with an efficient service and taking into account the necessity for maintaining independent financial administration of telecommunications on a sound basis.

3) **Economic and regulatory impact** of the **Internet, convergence** (services or infrastructure) and **new services, such as OTT,** on international telecommunication services and networks.

# SG3 Mandate over the recent 6 Study Periods (1997-2020)

# SG3: Questions under Study

| | |
|---|---|
| *Working Party 1: Charging and accounting/settlement mechanisms* | |
| **Question 1** | Development of charging and accounting/settlement mechanisms for international telecommunications services using the next-generation networks (NGNs), future networks, and any possible future development, including adaptation of existing D-series Recommendations to the evolving user needs |
| **Question 2** | Development of charging and accounting/settlement mechanisms for international telecommunications services, other than those studied in Question 1/3, including adaptation of existing D-series Recommendations to the evolving user needs |
| **Question 13** | Study of Tariff, Charging Issues of Settlements Agreement of Trans-multi-country Terrestrial Telecommunication Cables |
| *Working Party 2: General economic and policy factors related to provision and cost of ICT services* | |
| **Question 3** | Study of economic and policy factors relevant to the efficient provision of international telecommunication services |
| **Question 4** | Regional studies for the development of cost models together with related economic and policy issues |
| **Question 8** | Alternative calling procedures and misappropriation and misuse of facilities and services including calling line identification (CLI), calling party number delivery (CPND) and origin identification (OI). |
| **Question 12** | Tariffs, Economic and Policy Issues Pertaining to Mobile Financial Services (MFS) |

# SG3: Questions under Study

| Working Party 3: General economic and policy factors related to the enablers of ICT services | |
|---|---|
| **Question 6** | International Internet connectivity including relevant aspects of Internet protocol (IP) peering, regional traffic exchange points, cost of provision of services and impact of transition from Internet protocol version 4 (IPv4) to Internet protocol version 6 (IPv6) |
| **Question 11** | Economic and policy aspects of big data and digital identity in international telecommunications services and networks |
| *Working Party 4: General economic and policy factors related to the regulatory aspects of mobile communications, competition and convergence* | |
| **Question 7** | International mobile roaming issues (including charging, accounting and settlement mechanisms and roaming at border areas) |
| **Question 9** | Economic and regulatory impact of the Internet, convergence (services or infrastructure) and new services, such as over the top (OTT), on international telecommunication services and networks |
| **Question 10** | Definition of relevant markets, competition policy and identification of operators with significant market power (SMP) as it relates to the economic aspects of the international telecommunication services and networks |

# Resolution 54: Creation of, and assistance to, regional groups

**ITU-T**

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY
Hammamet, 25 October – 3 November 2016

**Resolution 54 – Creation of, and assistance to, regional groups**

Recognizing:

- *"…the successful establishment of regional groups under Study Group 3, which leads studies relating to policy, tariff and accounting matters (including costing methodologies) for international telecommunication services and study of related telecommunication economic, accounting and policy issues;*

- *…the sustainability of the regional groups of Study Group 3, and the encouraging start of regional groups established in accordance with this resolution"*

# SG3: Global Footprint across 5 Regions

**SG3RG-ARB**
Regional Group for the Arab Region

**SG3RG-AO**
Regional Group for Asia and Oceania

**SG3RG-LAC**
Regional Group for Latin America and the Caribbean

**SG3RG-AFR**
Regional Group for Africa

**SG3RG-EURM**
Regional Group for Europe and the Mediterranean Basin

## Recent ITU-T SG3 Regional Group Meetings

| Meeting | Dates | Location |
|---------|-------|----------|
| Regional Group for Africa (SG3RG-AFR) | 18-22 February 2019 | Antananarivo, Madagascar |
| Regional Group for Latin America and the Caribbean (SG3RG-LAC) | 25-29 March 2019 | Managua, Nicaragua |
| Regional Group for Eastern Europe, Central Asia and Transcaucasia (SG3RG-EECAT) | 21 May 2019 | Saint Petersburg, Russia |
| Regional Group for Asia and Oceania (SG3RG-AO) | 2-4 October 2019 | Colombo, Sri Lanka |
| Regional Group for the Arab Region (SG3RG-ARB) | 23-24 October 2019 | Dubai, United Arab Emirates |

## Future ITU-T SG3 Regional Group Meetings

| Meeting | Dates | Location |
|---------|-------|----------|
| Regional Group for Africa (SG3RG-AFR) | February 2020 | Togo (*TBD*) |
| Regional Group for Latin America and the Caribbean (SG3RG-LAC) | March 2020 | Paraguay (*TBD*) |
| Regional Group for the Arab Region (SG3RG-ARB) | June/July 2020 | Tunisia (*TBD*) |
| Regional Group for Asia and Oceania (SG3RG-AO) | August 2020 | Papua New Guinea (*TBD*) |

# Regional Forums and Workshops

| Recent Workshops & Forums | | |
| --- | --- | --- |
| *Forum* | *Dates* | *Location* |
| Regional Standardization Forum on Emerging Economic, Regulatory and Policy Trends for an Inclusive, Sustainable and Trustworthy Digital World | 18 February 2019 | Antananarivo, Madagascar |
| Workshop on International Numbering Resources (INRs) for the Americas | 25 March 2019 | Managua, Nicaragua |
| Workshop on Network 2030 jointly with ITU Forum on Future Applications and Services Perspective 2030 | 21 May 2019 | Saint Petersburg, Russia |
| Regional Standardization Forum (RSF) on "Addressing Competition Issues in ICT Economy" | 1 October 2019 | Colombo, Sri Lanka |
| Inter-regional Standardization Forum on "Operational issues on numbering, emergency service and OTTs" | 22 October 2019 | Dubai, United Arab Emirates |

# ITU-T SG3 and the ITU/BDT Regional Economic and Financial Forums of Telecoms/ICTs for Africa, Arab States, Asia and Pacific, Latin America and the Caribbean

- In coordination with Study Group 3 Regional Meetings, the ITU's development bureau (BDT) organizes **Regional Forums** addressed at policy makers, regulators and operators in the different regions

- Typically, these forums are held **immediately preceding the SG3 Regional Meeting**, e.g. 2 days for Forum, 2 days for SG3RG

- The Regional Forums are a unique platform for stakeholders to exchange information and knowledge on regulatory, economic, costing and tariff issues, and provide invaluable and effective support to the work of the ITU-T Regional Study Groups;

- BDT also collects *Regulatory* and *Tariff Policies* data through annual surveys. This data is shared with Forum and SG3RG participants at the annual regional meetings.

- See also the *ITU ICTEye*database

# SG3 Regional Work Items

- STUDY_ROAMREG: *Regional Roaming Initiatives*

- D.ONARegionalRoaming: *Regional Recommendation for Africa on One Network Area Roaming*

- D7_R_ROAM: *Regional Recommendation to address high roaming charges, regulatory approaches and impact on traffic*

- D7_R_OTTBypass: *Regional Recommendation on OTT bypass including national and regional collaboration between Member States and operators to deal with the OTT bypass issue*

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# SG3 Achievements: Recommendations

Some key D-Series recommendations under the responsibility of SG3
= *Normative texts,  approved by members)*

- **International Internet connectivity**  D.50

- **Alternative Calling Procedures** D.201

- **Charging for Mobile Services**  D.93,D.99

- **Charging for Mobile Roaming** D.98

- **Charging/accountingfor international telephone service**
  D.115, D.116, D.140, D.150

- **Telephone/Telex Accounts**D.170

- **Pricing and accounting/settlementissues related to international telecom services** D.195,D.190

# SG3 Achievements: Recommendations

During the SG3 parent meeting of April-May 2019, the following recommendations were approved:

- ITU-T D.198 (D.Unipricelist), "Principles for unified format of price/tariffs/rates-lists used for exchanging telephone traffic"

- ITU-T D.262 (D.OTT), "Collaborative Framework for OTTs"

- ITU-T D.263 (D.MFS), "Costs, charges and competition for mobile financial services (MFS)"

# Recommendation ITU-T D.198 (D.Unipricelist)
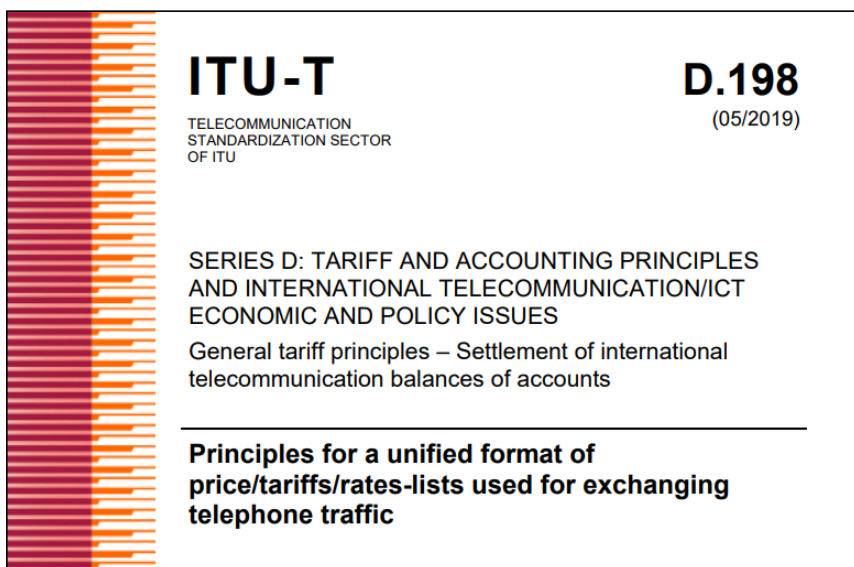


ITU-T D.198 (05/2019)

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

SERIES D: TARIFF AND ACCOUNTING PRINCIPLES AND INTERNATIONAL TELECOMMUNICATION/ICT ECONOMIC AND POLICY ISSUES

General tariff principles – Settlement of international telecommunication balances of accounts

Principles for a unified format of price/tariffs/rates-lists used for exchanging telephone traffic

- Principles for unified format of price/tariffs/rates-lists used for exchanging telephone traffic
- ITU-T D.198 recognizes the right of any operator to present price/tariffs/rates charged for telecommunication services in any form deemed convenient for the operator. It recommends that telecommunication companies offering international connections/exchange of traffic make use, as far as possible, of the same templates/forms/format of data to represent traffic destinations and offered price/tariffs/rates including if required optional clarifying information or quality of service criteria.
- Available at: www.itu.int/rec/T-REC-D.198

# Recommendation ITU-T D.262 (D.OTT)
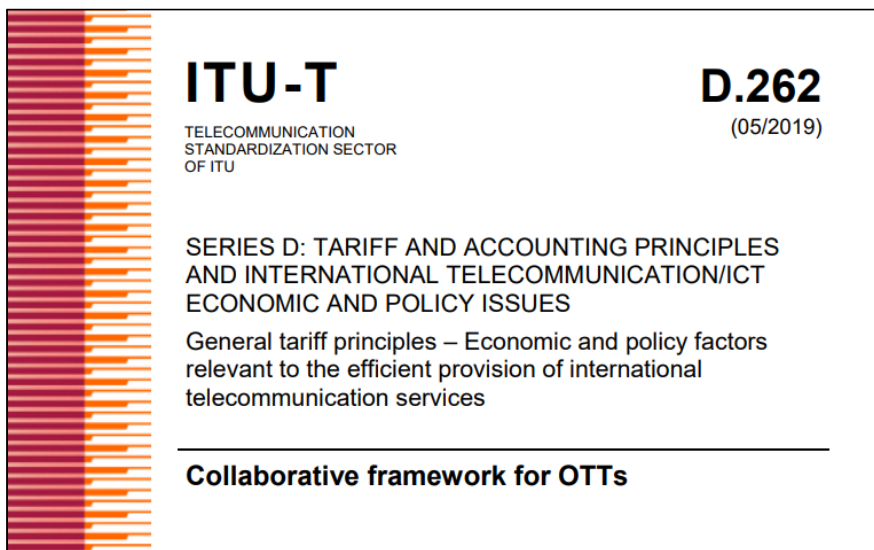


- Collaborative Framework for OTTs
- ITU-T D.262 provides a collaborative framework in order to promote competition, consumer protection, consumer benefits, dynamic innovation, sustainable investment and infrastructure development, accessibility and affordability in relation to the global growth of the over the top (OTT) applications.
- Available at: www.itu.int/rec/T-REC-D.262

# Recommendation ITU-T D.263 (D.MFS)



**ITU-T**         **D.263**

(05/2019)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES D: TARIFF AND ACCOUNTING PRINCIPLES
AND INTERNATIONAL TELECOMMUNICATION/ICT
ECONOMIC AND POLICY ISSUES

General tariff principles – Economic and policy factors
relevant to the efficient provision of international
telecommunication services

**Costs, charges and competition for mobile
financial services (MFSs)**

- Costs, charges and competition for mobile financial services (MFS)

- ITU-T D.263 proposes a possible approach to reduce high retail and wholesale telecommunication charges related to mobile financial services (MFS).

- Available at: www.itu.int/rec/T-REC-D.263

# SG3 Achievements: Recent Technical Reports



- DSTR-DFSECO - The digital financial services ecosystem
- DSTR-DFSREG - Regulation in the digital financial services ecosystem
- DSTR-DFSSNDL - Impact of social networks on digital liquidity
- DSTR-DFSCA - Competition aspects of digital financial services
- DSTR-DFSRP - The regulator's perspective on the right timing for inducing interoperability
- DSTR-DFSPI - Access to payment infrastructures
- DSTR-DFSCP-Commonly identified consumer protection themes for digital financial services
- DSTR-DFSUAAFR - Review of DFS user agreements in Africa: A consumer protection perspective

# SG3 Achievements: Technical Reports

- Technical Report on the Economic Impact of OTTs
- Technical Report on Methodologies for Spectrum Valuation
- Technical Report on Digital Financial Services (DFS) - Glossary
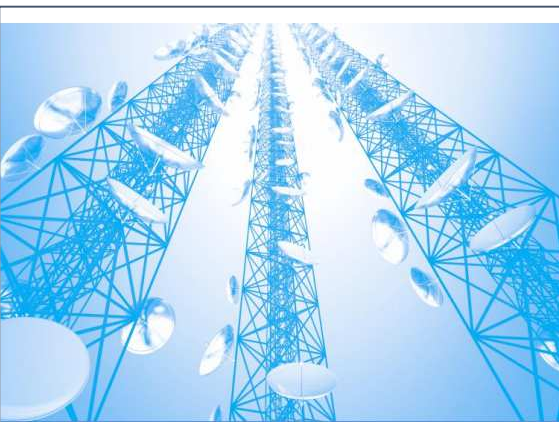


Methodologies for valuation of spectrum
*Technical Report*
2017

Economic Impact of OTTs
*Technical Report*
2017

Digital Financial Services (DFS) – Glossary
*Technical Report*
2018

# SG3 Ongoing Work: New Work Items

| Name | Title |
|---|---|
| STUDY_doublecharging | Study on 'double charging' in terms of accounting/settlement mechanisms for international telecommunications services |
| STUDY_IMT2020MVNOs | IMT2020-related policy considering MVNOs |
| STUDY_DTRANS | Future of regulation for digital transformation |
| STUDY_D52GUIDE | Guidelines on implementation of Recommendation ITU-T D.52 focusing on operationalization of regional Internet exchange points |
| TR_IoTM2M_roaming | Technical Report on Roaming aspects of IoT and M2M including any related economic and tariff principles |
| D.IoT/M2M Roaming | Roaming aspects of IoT and M2M including any related development and tariff principles |
| STUDY_DCB | Direct Carrier Billing |
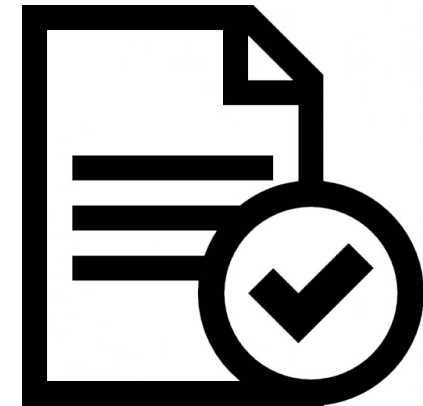
# SG3 Ongoing Work: Others Work Items

| Name | Title |
|------|-------|
| D.Colocation | Colocation and Access Charges |
| D.IoTpolicy | Guidelines on Tariff and regulatory aspects of Internet of Things (IoT) |
| D.ConsumerOTT | Customer redress mechanism and consumer protection |
| STUDY_Convergence | Study on the economic impact of convergence of technology and services and the role of the Regulator |
| D.NumberPort | Recommendation ITU-T Methodological guide for determining the impact of numerical portability on competition |
| Study_bigdata | Technical Paper on economic and policy aspects of Big Data in international telecommunication services and networks |
| D.ComplIC | Draft Recommendation ITU-T D.XX on Framework for the Competitive Provision of International Internet Connectivity (IIC) |
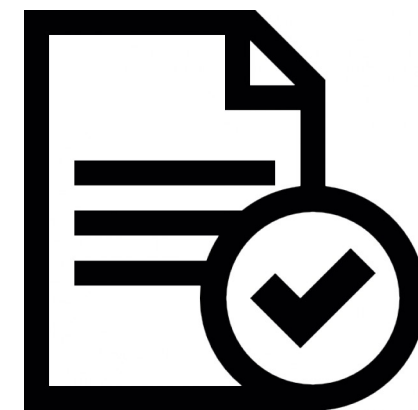
# SG3 Ongoing Work

- Determined draft new Recommendations <span style="color:red">ITU-T D.264 (D.SpectrumShare</span>), "Shared use of spectrum and telecommunication infrastructure as possible methods for enhancing the efficiency of telecommunications"

- ITU-T D.264 proposes a set of possible methods to help telecommunication providers save costs and enhance efficiency through the shared use of spectrum and telecommunication infrastructure, including passive infrastructure sharing, active infrastructure sharing and spectrum sharing in the active infrastructure sharing.

- Member States consultation began from 1 October 2019 and will be proposed for approval at the meeting of ITU-T Study Group 3 meeting (Geneva, 31 March - 9 April 2020). More information at TSB Circular 167: www.itu.int/md/T17-TSB-CIR-0167

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# Study Group 3 ..
## ...is different from others ITU-T SGs ...

- SG 3 is the **only** ITU-T SG that deals with **policy and economic issues.**

- **Unique global forum** to improve the understanding of **the financial and economic aspects** associated with the growth of ICT, particularly with respect to the shift to IP-based and NGN/Future Networks and the exponential rise in mobile wireless communications.

- SG3 **membership is diverse** and includes Member States as well as service providers (Sector Members), Academia Members and international organizations (e.g. WTO).

# WTSA Resolutions related to SG3

| WTSA Resolution 29 | Alternative calling procedures on international telecommunication networks |
|---|---|
| WTSA Resolution 61 | Countering and combating misappropriation and misuse of international telecommunication numbering resources |
| WTSA Resolution 62 | Dispute settlement |
| WTSA Resolution 64 | Internet protocol address allocation and facilitating the transition to and deployment of IPv6 |
| WTSA Resolution 65 | Calling party number delivery, calling line identification and origin identification |
| WTSA Resolution 84 | Studies concerning the protection of users of telecommunication/information and communication technology services |
| WTSA Resolution 88 | International mobile roaming |
| WTSA Resolution 89 | Promoting the use of information and communication technologies to bridge the financial inclusion gap |

# Wrap-Up & Conclusion



- The work of ITU-T SG3 continues to align technical innovation and policy development.

- An inclusive approach on economic regulation is important with the participation of both developed and developing countries through the use of regional group meetings.

- World Telecommunication Standardization Assembly (WTSA-20) will provide an opportunity to revisit SG3 Mandate and the Questions to be undertaken for the next study period (2021-2024).

# Thank You for Your Attention

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